



JOB DESCRIPTION

State Form 52468 (12-05)

This document is used to provide a basic description of essential duties and other work elements.

Employee Name: Vacant		
Agency: Indiana Department of Environmental Management		BU: 00495
Division: Office of Land Quality (OLQ)	Section/District: Engineering Section	
Job Title: Environmental Engineer 2		Job Code: 1D02
Working Title (if different from above):		
Reports To:		
FLSA Status: <input type="checkbox"/> Non-Exempt (OT Eligible) <input checked="" type="checkbox"/> Exempt		Effective Date :

Purpose of Position/Summary:

Incumbent serves as a senior level engineer in the Engineering Section, Permits Branch for solid and hazardous waste management, confined feeding operation, septage and land application programs responsible for managing, directing and reviewing as well as ensuring compliance/enforcement of state and federal laws, regulations and standards, including facilitating the permit process, for a variety of programs and program elements. Incumbent provides technical expertise and guidance. Incumbent serves as a senior level worker responsible for providing advanced engineering and geotechnical expertise to ensure facility compliance with environmental regulations for the Indiana Department of Environmental Management. Ensures appropriate design, construction, and/or installation, operation, monitoring and maintenance methods and procedures, and compliance with rules, regulations and laws. Reports to an Environmental Engineer Supervisor.

Essential Duties/Responsibilities:

- Manages solid and hazardous waste management, confined feeding operations or septage and land application programs providing technical expertise to municipalities, industry plant officials, engineering consultants and contractors
- Provides technical assistance to staff, state and federal agencies, industries, contractors, environmental engineering consultants and the public
- Evaluates plans and specifications for storage, treatment and disposal facilities, provides comments, recommends approval/denial of construction / operation / closure / post-closure / remedial action permits according to existing and proposed federal and state laws and regulations; develops construction or treatment process alternatives to improve compliance to regulations
- Interprets laws, regulations and requirements, concerning storage, treatment and disposal facilities and construction/operation compliance for communities and consultants
- Performs technical analysis of the impact of the facilities, as needed
- Evaluates engineering processes of pollution sources and their impact
- Evaluates permit applications, prepares comments and draft permits, conducts studies to support issuance/reissuance of permits, funding action for landfills or water or solid/hazardous waste plant construction or modifications
- Reviews solid and hazardous waste landfills, surface impoundment's, storage and treatment facilities during construction and operation
- Develops and recommends strategies, guidelines and procedures for control assessment
- Responds to inquiries concerning environmental issues from citizens, environmental groups verbally and in writing
- Interprets and assists in developing policies, rules and regulations
- Serves as a state representative from other states, federal government, engineers, university staff, municipalities and industrial facilities
- Reviews/evaluates and writes technical reports on various pollution issues
- Consults with others in developing/reviewing agency technical design guidelines

- Assists in formulating section and program procedures and policies to accomplish agency objectives, maintain schedules and comply with state and federal rules, regulations, laws and agency policies
- Makes recommendations regarding updating of state laws and rules
- Provides testimony at public meetings, administrative hearings and adjudicatory hearings
- Consults with agency legal staff regarding non-compliance cases
- Attends related meetings, training, conferences and seminars in order to remain abreast of all developments in the field
- Reviews designs, develops, and tests computer programs to aid in research
- Assists in leading a group of professionals working on a specific program assigning and reviewing work
- Performs related duties as assigned.

Job Requirements:

- Knowledge and skill typically acquired through a baccalaureate degree in accredited engineering field in areas of environmental, sanitary, civil/geotechnical, chemical or a related area, plus graduate education or considerable related work experience; graduate degree may or license to practice engineering in Indiana may substitute some related work experience
- Thorough knowledge of the principles and practices of assigned area of technology such as industrial and municipal water or waste water treatment processes, solid/hazardous waste treatment or air pollution control, and landfill design, construction, operation and maintenance
- Thorough knowledge of the sciences as they apply to assigned area (soils, chemical reactions, kinetics, biological processes, geotechnical, engineering hydrology, geology, hydrogeology, construction technology, thermodynamics and mathematics)
- Thorough knowledge of and ability to interpret and apply federal/state laws and regulations, engineering and environmental law principles, regulatory/permitting/enforcement policy principles and precedents
- Ability to review plans and specifications for treatment and control systems and to recommend alternatives based on environmental assessment and cost analysis
- Ability to conduct inspections of facilities under construction or while in operation
- Ability to prepare reports for use as evidence and/or basis for recommendations for action
- Ability to develop and implement studies and programs, define procedures, and prepare schedules to accomplish set objectives
- Ability to prepare extensive reports or guidance documents
- Thorough knowledge of laboratory methods and procedures used in program area
- Ability to communicate verbally and in writing with individuals and in group settings, and relate complex technical concepts to untrained individuals
- Broad knowledge of computer programming and systems design as it relates to program area
- Ability to deal tactfully with a variety of individuals, officials, industry representatives, and consulting firms
- Ability to direct work of others and provide both technical and administrative guidance and leadership.

Supervisory Responsibilities/Direct Reports:

No direct reports; assists environmental engineer I and the Section Chief in training and providing guidance to new staff and interns.

Difficulty of Work:

Incumbent must be able to analyze and apply technical knowledge under conditions in which multiple variables must be considered. Work is non-routine, broad in scope and requires extensive judgment in working to interpret environmental health laws and developing innovative solutions to pollution problems. Incumbent provides assistance in major program modifications and aids in developing procedures, policies and regulations for new programs based upon guidelines provided by the federal government and agency policies. Incumbent must occasionally develop new methods or techniques when no promulgated methods are available. Methodology of accomplishing the total task involves initiative and creative

thinking, judgment and decision-making. Development of programs and timetables often is made in the face of significant differences of opinion. Rules and regulations may be vague and complex requiring considerable judgment as to their applicability.

Responsibility:

Incumbent generally works independently following general instructions concerning purpose and desired results given prior to start of work. Work is generally reviewed upon completion by the supervisor, and if needed, by engineering technical experts for soundness of judgment and conclusions, technical accuracy and conformance with practices and policies. Incumbent may review staff's material, and provide technical guidance to other staff. The incumbent makes recommendations concerning issuance of permits and construction involving multi-million dollar expenditures. Decisions made may require considerable judgment and errors made could go unnoticed. Incumbent may be ultimately responsible for health of workers and the public as erroneous decisions could go unnoticed. Technical recommendations made by incumbent are instrumental in shaping the direction and effectiveness of the assigned office program.

Personal Work Relationships:

Incumbent works with a wide variety of individuals including representatives of federal, state and local agencies, and private industry and construction firms, consultants, attorneys, public, and staff. Contacts include legislators, government officials, consulting engineers, and other department staff for the purpose of providing information on project status, schedules, and technical data, and to review, discuss and solve problems relating to project development, completion of construction and compliance issues.

Physical Effort:

Majority of the work is performed in the office and involves normal physical effort related to office work. Field or site visits may be conducted 5-20% of the time. Incumbents may possibly be subjected to potential hazards present during visits and inspections, and adverse weather conditions, rough terrain and high elevations while observing construction, installation, monitoring and stack tests. Survey equipment and GPS units may have to be carried to sites. 24/40-hour safety training and the annual 8-hour safety refresher are required.

Working Conditions:

Normal office environment for the most part. 5 - 20% field or site visits conducted may present some potential for exposure to potential hazards present at the site.